



**CANCER MONITORING BY ABERRANT PROMOTOR METHYLATION OF
THE TRANSCRIPTION FACTOR GENES PAX5 ALPHA PAX5 BETA, NOVEL
LOOP HELIX LOOP PROTEIN, NOVEL GENE 2, AND BETA3 GENES**

5

ABSTRACT OF THE DISCLOSURE

PAX5 alpha and PAX5 beta and other genes as markers for cancer detection. A PCR-based technique of methylated CpG island amplification, followed by representational difference analysis, for identifying genes methylated in human cancer.

- 10 The genes PAX5 alpha and PAX5 beta, novel loop helix loop protein, and a novel gene 2, and beta3 genes when methylated serve as markers for detecting, monitoring, diagnosing and prognosticating breast, colon, and lung cancer in humans. Amplification methods, including primer sequences for methylation specific polymerase chain reaction, are disclosed.

15